

Chrysocharis albitarsis Ashm.

Aug. 1, Oct. 2, 6, 1895.

4 specimens, ♂, ♀.

Solenotus bimaculatus Ashm.

Sept. 27, 1895.

1 specimen, ♀.

Co-types, types in Ashmead coll.

Solenotus pulchripes Ashm.

Sept. 27, Oct. 2, 3, 1895.

Co-types, type in Ashmead coll.

Tetrastichus racemariae Ashm.

July 7, 1894.

1 specimen, ♀.

Tetrastichus sp. ?

Sept. 27, Oct. 27, 1895.

4 specimens, ♂.

Tetrastichus sp. ?

Oct. 2, 1895.

2 specimens, ♀.

Closterocerus niger Ashm.

June 25, 1894.

1 specimen, ♂.

Co-type, type in Ashmead coll.

Rileya cecidomyiae Ashm.

Aug. 16, 1865.

1 specimen, ♀.

EVANIIDÆ.

Hyptia reticulata Say.

Gasteruption incertus Cress.

Notes of a Winter Trip in Texas, with an Annotated List of the Orthoptera.

BY CHARLES A. HART, Urbana, Ill.

In late December and early January I had the pleasure of briefly studying the insect-life of four unlike Texan localities. For valued assistance in this undertaking, I wish to express my thanks to my relative, Prof. E. C. Green, and to Prof. A. F. Conradi, both of the Texas Agricultural and Mechanical College; to the Houston and Texas Central Railroad; and to Mr. A. P. Atwater, of Houston.

The first six days, December 22-27, were spent in the vicinity of the College, in Brazos County, 150 miles inland from the Gulf. The soil is clayey or sandy upland, partly covered with a scrubby forest, mostly post oak, and intersected by shallow grassy ravines. On December 28th and 29th I was in the broad bottom lands of the Brazos River, in the same county, areas of heavy forest, alternating with large fields of cotton, alfalfa, etc. January 3d and 4th saw me at work along the low open grassy outer shore of Galveston Island, near the west end of the great sea wall; and the 5th and 6th, in the coastal plain at Houston, fifty miles inland, west of the section called Houston Heights, in the vicinity of

the head of a small steep-sided ravine, running to the Buffalo bayou near by, the surroundings being a sparse forest, mostly loblolly pine.

The conditions were essentially those of late October in Illinois. The grass and weeds were dead, as a rule, and the deciduous trees leafless. A few frosts had previously occurred. The weather on the above days was sunny and warm at mid-day, giving a brief collecting period from about 11 A. M. to 3 P. M., when a few insects were seen moving about in the sunshine.

Of the Hymenoptera, two or three parasitic species were noted, and a few *Polistes pallipes* at Houston. The common stinging ants about College Station, *Pogonomyrmex comanche*, were seen about their low mounded nests. Occasional Muscidae and three or four butterflies were observed. A single species of dragonfly (*Sympetrum*) and a prettily banded *Panorpa* were taken several times. Two tiger-beetles and a few *Eleodes* were found sunning themselves. Among Hemiptera there were taken a few pentatomids and a large coreid (*Acanthocephala declivis*). The only plant-feeder which appeared to be definitely at work was a small *Clastoptera*-like species swept from the fresh green pine leaves. A bovine skull lying on the ground at the Houston locality revealed the openings of several large round burrows beneath it. Upturning the loose soil with a stick, a number of *Geotrupes* were thrown out. *Dermestes* and *Silpha* were noted on animal remains at Galveston.

Insects under bark, logs, etc., seemed not especially numerous. They were mostly of the usual familiar types, though often of unfamiliar species. At Galveston nearly all wood fragments had been swept away, except a line of driftwood near the inner edge of the beach, which was destitute of insect life, and only stone and metal debris remained. These gave some interesting Nabidae and Tenebrionidae, however, and an old pair of pants by a pasture fence proved quite a treasure-house. *Lacon rectangulus* and *Opatrinus aciculatus* were common, both here and at College Station. The remaining principal hibernating forms seen were Carabidae, *Termes*,

Disonycha, Reduviidæ, Aradidæ, ants, and sluggish, immature scorpions.

The Orthoptera received especial attention. The previous frosts had apparently killed all grasshoppers in level, open lands and other exposed situations, but they were still fairly common where protected by trees, weeds, brush, or sloping banks, as in the grassy hollows about College Station. At Galveston they were somewhat more generally distributed. Out of about 1,200 insects collected, over 800 were Orthoptera. The largest collection of Orthoptera in any one day came from the Houston locality, where 108 were taken on January 6th. No Phasmidæ or Mantidæ were observed in any stage, and the Locustidæ were represented only by a few *Conocephalus*, some of these being under shelter, as if hibernating. Some of the 'hoppers were getting pretty ragged, but in general they were in fair condition. The following is an annotated list of the species, including some other Texas records. These are mostly from specimens received from Mr. Conradi, now in the collection of the Illinois State Laboratory of Natural History, in which all the above material has been placed. The four localities are cited by their initials, using "B." for the Brazos River bottoms. The dates have already been given for each place, and need not be stated in detail.

LIST OF THE ORTHOPTERA.

Anisotabis maritima Bon. B., 19 adults and nymphs. Under logs about farm buildings, near the high river-bank. New to Texas, and unusual so far inland.

Labia burgessi Scudd. H., 9 adults, 8 nymphs. Found under the loose bark of a large fallen pine, in company with the next species, from which it scarcely differs, except in the obtected and apparently functionless wings, and the smaller tegmina. A Florida species, new to Texas.

Labia guttata Scudd. H., 3 adults, 9 nymphs. Found with the preceding, as stated.

Ischnoptera? spp. C., B., G., 7 nymphs. Under boards, etc.

Kakerlac americana Scudd (*Loboptera*). "Tex." (Bolter Coll.) New to Texas.

Periplaneta americana Linn. G., 4 examples; C. (Coll. I. S. L. N. H.) This is the dominant roach in Houston and Galveston.

Oligonyx scudderi Sauss. C. (Coll. I. L. N. H.)

Paratettix texanus Hanc. C. (Coll. I. S. L. N. H.); H., 3, more seen. Near the small stream.

P. texanus nanus Hanc. H., 2. This is quite possibly a distinct species.

Tettigidea lateralis Say. C. (Coll. I. S. L. N. H.); H., 1.

Syrbula admirabilis Uhl., October 28th (Coll. I. S. L. N. H.); H., 1. Much larger than Illinois examples.

Mesochlora abortiva Brun. C., 14 ♂, 28 ♀, 1 young; B., 4 ♀. One of the commonest species about College Station, on the dry, thinly grassed sides of stream hollows.

Mesochlora unicolor n. sp. C., 8 ♂, 11 ♀; B., 1 ♂. Associated with the preceding, and not differing appreciably from it except in the dorsal sculpture and coloration; the two not intergrading, however, in the series obtained.

Readily recognized by the uniform gray of the tegmina and dorsal surfaces of head and pronotum, the lateral carinae uniform throughout, not partly swollen, at middle less sharply curved than in *abortiva*, and usually separated here by more than half the distance between them at the posterior margin. The pronotal lateral black spot and oblique carina are about as in *abortiva*.

In *abortiva*, on the other hand, there is a velvety black line on the tegmina, sometimes broken, and two straight stripes of this color on the head and pronotum above. On the pronotum these include the strongly clepsydral lateral carinae, the convergent portions of which are straight, swollen, and ivory-white, connected by a fine short arc, the carinae here separated by about half the distance between them on the posterior margin. Type in collection of Ill. State Lab. of Nat. Hist.

Amblytropidia occidentalis Sauss. C., 1; H., 23. Abundant among the pines, very elusive, flying short distances noiselessly and almost invisibly, the dorsal color closely matching that of the fallen pine needles.

Orphulella pelidna Burm. C., 24, 1 nymph; B., 1; H., 36; G., 6. Widely distributed and common in short grass. Galveston examples are mostly a little shorter winged and greener, suggesting the next.

O. picturata Scudd. C., 12; B., 6. With the preceding.

Dichromorpha viridis Scudd. H., 2. Green variety.

Arphia xanthoptera Germ. C., 1; H., 4.

A. simplex Scudd. H., 8 ex. With the preceding on dry sunny open spots in woods.

Chortophaga viridifasciata DeG. C., 12; B., H., 5; G., 10. Many others seen. The green form is rarer than in Illinois. Both sexes were seen to produce the crackling sound in flight. I was struck by the abundance and activity of both young and adults. They seemed thoroughly at home at this season.

Encoptolophus costalis Scudd. C., 3; B., 4; H., 1. On bare dry exposures of washed-out roads or stream banks.

Hippiscus rugosus Scudd. C., 1.

Dissosteira carolina Linn. B., 1.

Trachyrhachys fuscifrons Stal. (*Mestobregma*) C., 1. On low gravelly mound in stream bed.

Conoza amplicornis Caud. (*Psinidia sulcifrons amplicornis* Caud.) G., 1 ♂, 1 ♀. Among little sandy hillocks, in company with *Heliasius*. Described from a male and female from Victoria, Tex. Apparently a good species. Posterior edge of pronotum dorsally strongly concave each side, with a marked acute process at middle. Wings of female orange tinted. Pronotal carina deeply cut twice. The male is remarkably small; body 12.5 mm., tegmina 13 mm. antennæ 9 mm. Other characters just as described by Caudell.

Trimerotropis citrina Scudd. B., 5; G., 10. Common on the high banks of the Brazos, and on the sides of the canal at Galveston.

Heliasius sumichrasti subrosea Caud. G., 3. Found with the *Conoza*. The absence of the pronotal carina between the sulci is not always evident.

Brachystola magna Gir. Rescue, Tex., June 8th (Coll. I. S. L. N. H.).

Dictyophorus reticulatus Thunb. C., July 20th (Coll. I. S. L. N. H.).

D. marci Serv. C., May 15th; Wellborn, Tex., June 26th (Coll. I. S. L. N. H.).

Leptysma marginicollis Serv. G., 1.

Schistocerca americana Dru. C., 8; H., 3; G., 4; C. Aug. 8 and 22, and Nov. 18 (Coll. I. S. L. N. H.). Common about trees or bushes, flying to them when disturbed.

S. damnifica Sauss. H., 8. Flies up into trees as does *americana*, but is more inclined to be tricky and exasperating.

Paraidemona mimica Scudd. C., 8; B., 1; H., 2; G., 3. In dry, sparsely grassy nooks.

Campylacantha acutipennis Scudd. C., 1; B., 1; Paris, Tex., Oct. 6 (Coll. I. S. L. N. H.). This is the infusate form, often found associated with *C. olivacea*, and doubtfully distinct from it.

Melanoplus atlantis Riley. B., 10; C., Oct. 28 (Coll. I. S. L. N. H.). In the corner of a bottom-land cotton-field, next to a farm yard, *Melanopli* were remarkably abundant, attracted, perhaps, by belated plants. The species were *atlantis*, *femur-rubrum* and *impiger*?

M. scudleri texensis, n. var. C., 18; B., 2; H., 15. Common in well-sheltered spots with moderately thick grass, associated with *M. plebejus*. The length of the furcula, not at all "exaggerated" in Scudder's figure *—in some cases fully one-third the length of the supra-anal plate—the more rounded tegmina, and the very distinct lateral stripe in both sexes, seem to entitle this to varietal rank. Type in coll. I. S. L. N. H.

M. femur-rubrum DeG. C., 2; B., 3; C., Oct. 28 (Coll. I. S. L. N. H.). Infrequent. One from each locality has glaucous hind tibiae.

* Proc. U. S. Nat. Mus., Vol. XX, Pl. XIV, fig. 6.

M. bispinosus Scudd. G., 4. Open pastures among grass and short weeds. The two males agree closely with Scudder's figure* but are considerably smaller than his. The metazona is short, decidedly shorter than the prozona. The larger male measures: body, 19 mm.; antennæ, 7.5 mm.; tegmina, 15 mm.; hind femora, 10.7 mm. The other is nearly one-fifth smaller.

M. impiger Scudd.? B., 12; G., 11; C., Oct. 28 (Coll. I. S. L. N. H.). Found in open grassy ground; particularly abundant in the cotton field referred to under *allanis*. All are females, including a number in the State Laboratory Collection, and a persistent search at each locality failed to disclose the male. In the Texas Agricultural College collection they are labeled *impiger*, but the description of this does not fit them very well.

M. plebejus Stal. C., 14; B., 16; H., 6. Associated with *M. scudderi texensis*; superficially similar, but with glaucous hind tibiæ and very unlike male structures. Those from B. were in margin of heavy forest, associated with *M. robustus*.

M. deletor Scudd. C., 1; H., 27. Grassy banks in forest. Near *luridus*, but larger. The cercal upper fork is bent up more than Scudder's key indicates.

M. differentialis Thom. C., 1; Wellborn, Tex., Aug. 25; Brazos R., July 20; C., Aug. 20 and Oct. 28 (Coll. I. S. N. H.).

M. robustus Scudd. Common in margin of heavy forest area on low, flat-bottom land, associated with *M. plebejus*.

Scudderia furcata Brunn. C., ♂, ♀ (Coll. I. S. L. N. H.). Tarsi, hind tibiæ, and tips of hind femora blackish, and the tympanum and posterior edge of tegmina fuscous. Genital structures as in *furcata*.

Microcentrum laurifolium Linn. C., Oct. 3 (Coll. I. S. L. N. H.).

Conocephalus fuscostriatus Redt. G., 1. In the folds of the before-mentioned old pair of pants.

C. mexicanus Sauss. H., 1; G., 1.

Xiphidium strictum Scudd. Wellborn, Tex., June 26 (Coll. I. S. L. N. H.).

Slipalor cragini Brun. Wellborn, Tex., June 26 (Coll. I. S. L. N. H.).

Nemobius fasciatus villatus Harr. B., 1.

N. socius Scudd. C., 3; B., 6; G., 2. Apparently the commonest *Nemobius* about cultivated land. In several species of this genus an intermediate form between the long and short-winged forms has been noted, in which the tegmina are as in the long-winged forms, the dorsal field slightly projecting behind, but the wings are absent—as in Lugger's figure of *fasciatus villatus*. One of the *socius* is of this form.

N. funeralis, n. sp. C., one female. Rather small, almost wholly black, antennæ fusco-testaceous on basal half, except the basal joint, with a few black annulations; maxillary palpi black, the penultimate

*l. c., Pl. XIX, fig. 6.

joint fusco-testaceous; a faint dark testaceous margin in front of the eye, and a small spot anteriorly on the lateral lobe of the pronotum; abdomen above with gray spots in the usual pattern. Tegmina as long as head and pronotum, rounded and slightly oblique at tip, longitudinal veins prominent, cross-veins very feeble, lateral fields black, dorsal dark fuscous, a fine yellow line on vein at lateral margin of dorsal field, continued along apical margin of lateral field. Legs black, tibiae with testaceous interrupted line on upper face, first tarsal joint dark testaceous, black at tip; spines of hind tibiae testaceous at base and tip. Cerci fuscous; ovipositor short, black, nearly straight, distinctly denticulate, slightly exceeding cerci. Body 7.5 mm. long. Ovipositor 3.5 mm.; hind femora, 5.5 mm.; tegmina, 2.6 mm. Type in coll. I. S. L. N. H.

N. mexicanus Walk. C., 1.

N. carolinus Scudd. B., 1; H., 1 adult, 1 nymph.

Gryllus americanus Blatchl. B., 1; C. (Coll. I. S. L. N. H.). From what I have seen of this in Illinois, I should think it was clearly distinct. Scudder's description of *neglectus* is right for *pennsylvanicus*, but not for *americanus*.

G. pennsylvanicus Burm. G., 9; B., Mar. 22 (Coll. I. S. L. N. H.). Tegmina longer than in Illinois specimens, in the females fully reaching tip of abdomen. The B. specimen is long-winged. Of a large number of nymphs from under boards at C. and B., the majority are probably this species.

Ecanthus pini Beut. C. Coll. I. S. L. N. H.). This is the form near *4-punctatus*, but with a transverse bar on the basal antennal joint in place of the black dot, and assigned to the above species by Titus.*

On the Genus *Trachykele*, With Notes and Descriptions of Other North American Buprestidae.

BY H. C. FALL.

TRACHYKELE Mars.

There is perhaps no genus of North American Buprestidae concerning which so little is positively known as the one here named. Specimens are very rare in collections, our literature is almost bare of allusions to them, and foreign literature offers little more to the inquiring student. The genus was described in 1865 by Marseul, who based it upon a single specimen, said to have been found in the Custom House at Paris, emerging from a cedar of Lebanon ("Sortant d'un cedre du Liban"), by M. Blondel.

* 23d Rep. Ill. State Ent., p. 218.